

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,050	03/16/2001	Dominique Bernard Riche	T2154-906845	4713

7590 12/03/2002

Edward J. Kondracki
MILES & STOCKBRIDGE P.C.
Suite 500
1751 Pinnacle Drive
McLean, VA 22102-3833

EXAMINER

GRAY, JILL M

ART UNIT	PAPER NUMBER
----------	--------------

1774

DATE MAILED: 12/03/2002 //

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/809,050	Applicant(s) RICHE ET AL	
	Examiner Jill M Gray	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The rejection of claims 1-7 and 15 under 35 U.S.C. 103(a) as being unpatentable over Nieman et al, 4,163,827 is withdrawn in view of applicants' arguments.

The rejection of claims 9-15 under 35 U.S.C. 103(a) as being unpatentable over Nieman, '827 in view of King et al, 6,346,135 B1 is withdrawn in view of applicants' arguments.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicants' disclosure on page 1, line 13 through page 2, line 16 of the specification.

Applicants disclosure on page 1, line 13 through page 2, line 16 of the specification discloses that "it is known in the art to adjust the composition of molten material by introducing a cored wire into the molten material, further disclosing that this cored wire includes a wire core surrounded by a metallic casing." See lines 13-17. In addition, applicants disclose on page 2, lines 12-15 of the specification that "it is known to cover the metallic sheath with a wrapping which, being combustible without leaving any harmful residues, momentarily retards the propagation of heat to the core of the

Art Unit: 1774

cored wire" and "[t]his combustible wrapping is wound in a helix around the metallic sheath".

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make a cored wire as admittedly known in the art, comprising a wire core surrounded by a metallic casing, said metallic casing being covered with a wrapping which, being combustible without leaving any harmful residues, momentarily retards the propagation of heat to the core of the cored wire. As to the application of a varnish, it would have been obvious to add an adhesive of some sort to the helically wrapped paper layer to prevent unwinding.

3. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nieman et al, 4,163,827 (Nieman) in view of applicants disclosure on page 1, line 13 through page 2, line 16 of the specification.

Nieman teaches a cored wire for introducing additive into a molten metal bath comprising an elongated core element and wrapping the core element in a protective casing, wherein the casing is a helically wrapped ribbon strip. See abstract. In addition, Nieman teaches that the strip can be metal or paper composition, without departing from the spirit of his invention and that the core element can have more than one casing. See column 5, lines 1-24. This teaching would have provided a suggestion to the skilled artisan that a metal strip and paper strip could be used interchangeably with a reasonable expectation of success. Moreover, applicants disclosure on page on page 2, lines 12-15, of the specification discloses that it is known to make a cored wire having a metal sheath and wrapping the metallic sheath with a layer comprising a wrapping

which, being combustible without leaving any harmful residues, momentarily retards the propagation of heat to the core of the cored wire. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made in full knowledge of the general level of skill in the art, to modify the teachings of Nieman by producing a cored wire having multiple wrappings wherein a metallic ribbon strip is wrapped around the core element and a combustible ribbon strip, such as paper, is wrapped around the metallic ribbon. Regarding claim 6, it would have been obvious to include a varnish or adhesive material to prevent the combustible wrapping layer from unwrapping. As to claim 7, the width of the strips is not construed to be a matter of invention in the absence of clear factual evidence of unexpected or superior results directly related to the strip width.

4. Claims 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nieman, '827 in view of applicants' disclosure on page 1, line 13 through page 2, line 16 of the specification, further in view of King et al, 6,346,135 B1, (King).

Nieman and applicants' disclosure are as set forth previously, but are silent as to the inclusion of a protective metallic casing. King teaches a cored wire for introducing additives into a molten metal bath comprising a wire core, metallic sheath and protective jacket disposed over said metallic sheath. Moreover, King teaches that the outer jacket has a higher melting point than that of the core materials which leads to effective introduction of the additives to the molten metallic bath without melting the core materials. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined teachings of Nieman and the

Art Unit: 1774

general level of knowledge and skill in the art by including a protective metallic casing disposed on top of the wrappings, as taught by King which would result in effective introduction of additives to the molten metal bath. While Nieman may be concerned with the reduced thickness of the cored wire, this concern would not preclude the need for introducing cored wire into a molten metal bath in a manner that reduces splashing and reactivity of the metal being introduced, as taught by King. Accordingly, it is the examiner's position that the skilled artisan would have been motivated to include protective coatings as taught by King with a reasonable expectation of success of reducing reactivity and splashing when a cored wire is introduced into a molten metal bath.

Response to Arguments

5. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M Gray whose telephone number is 703.308.2381.

The examiner can normally be reached on 8:30-6:00.

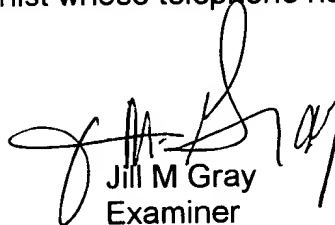
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 703.308.0449. The fax phone numbers for the organization where this application or proceeding is assigned are 703.305.5408 for regular communications and 703.305.3599 for After Final communications.

Application/Control Number: 09/809,050

Page 6

Art Unit: 1774

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0651.



Jill M Gray
Examiner
Art Unit 1774

jmg
November 30, 2002